MAR 14 2006

Attorney Docket No: 509/35644
PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s):	Michael J. Hawthorne et al.	Confirmation No.:	8826
Serial No.:	09/404,826	Art Unit:	2122
Filed:	September 24, 1999	Examiner:	Eric B. Kiss
For:	METHOD OF TRANSFERRING FILES AND ANALYSIS OF TRAIN OPERATIONAL DATA		

APPEAL BRIEF

Mail Stop Appeal Brief - Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Barnes & Thornburg Customer No:
23646
U.S. Patent and Trademark Office

Sir:

Below is a Appeal Brief in support of an appeal taken from the Final Office Action rejection of Claims 1-4, 7, 9, 10, 15-21, 46-49 and 51, mailed November 1, 2005. A Notice of Appeal was filed on December 28, 2005. A Pre-Appeal Brief Request for Review was filed on December 28, 2005 and a Notice of Panel Decision from Pre-Appeal Brief Request for Review was mailed February 14, 2006.

1. Real party in interest. All rights in this application have been assigned to New York Air Brake Corporation, a corporation existing under the laws of the State of Delaware.

2. Related appeals and interferences. Appellants, Assignee and undersigned counsel for Appellants are unaware of any appeals or interferences related to the present application on appeal.

3. Status of Claims. The application includes Claims 1-4, 7, 9, 10, 12-21, 46-49 and 51. Claims 12-14 are withdrawn. Claims 1-3, 7, 9, 10 and 15-19 have been rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 5,786,998 to Neeson et al. in view of U.S. Patent No. 5,533,695 to Heggestad et al. and U.S. Patent No. 5,978,718 to Kull. Claim 4 is rejected under 35 U.S.C. §103(a) as being unpatentable over Neeson et al. and Heggestad et al. and Kull and further in view of U.S. Patent No. 5,848,064 to Cowan. Claims

20 and 21 are rejected under 35 U.S.C. §103(a) as being unpatentable over Neeson et al., Heggestad et al. and Kull, and further in view of U.S. Patent No. 5,420,883 to Swensen et al. Claims 46-49 are rejected under 35 U.S.C. §103(a) as being unpatentable over Neeson et al., Heggestad et al. and Kull, and further in view of U.S. Patent No. 5,785,283 to Ehrenberger et al. Claim 51 is rejected under 35 U.S.C. §103(a) as being unpatentable over Neeson et al., Heggestad et al., and Kull, and further in view of U.S. Patent No. 5,620,155 to Michalek.

4. Status of Amendments. No amendments has been filed subsequent to the Final Rejection.

5. Summary of claimed subject matter.

Claim 1 is directed to a method of transferring files between a computer 18 (Fig. 1) on-board a train 12, 14, 16 (Fig. 1), and remote base stations 26 (Fig. 1), the computer 18 having a data base including truck structure information and location information about multiple remote base stations 26. The method comprises the following steps:

a) collecting one or more of event recorder data, train performance data and track data from on-board in files on the on-board computer 18 (Figs. 1, 2a, 2b), and (Specification page 7, paragraph beginning at line 18, and page 12, paragraph beginning at line 1);

b) determining from the data base the location of the train 12, 14, 16 (Fig. 1) relative to the track structure and whether the train 12, 14, 16 is within communication range of one of the remote base stations 26 (Specification page 8, lines 19-25 and paragraph beginning at line 31), the determining being made by using location information about the train 12, 14, 16, information about the track structure and location information about the multiple remote base stations 26 from the data base stored on the computer 18 on-board the train 12, 14, 16;

c) establishing from on-board the train a wireless communication with one of the multiple remote base stations 26 determined to be within communication range (Figs. 1, 2a and 2b, and (Specification page 8, paragraph beginning at line 19 and including lines 19-31, and paragraph beginning at line 32 through page 9, line 12); and

d) determining on-board the train which of the files are new since a last transmission and transferring the new files to one of the multiple remote base stations 26 determined to be within communication range (Figs. 1, 2a, 2b, and page 9, paragraph beginning at line 13, including lines 13-25).

Claim 46 is directed to the method according to Claim 1, wherein one of the remote base stations 26 includes track data, and further including the step of transferring the track data from one of the remote base stations 26 to the on-board computer 18 and subsequently transferring the track data from the on-board computer to another remote base station 26.

6. Grounds of rejection to be reviewed on appeal. Whether Claims 1-3, 7, 9, 10 and 15-19 are unpatentable under 35 U.S.C. §103(a) over U.S. Patent No. 5,786,998 to Neeson et al. in view of U.S. Patent No. 5,533,695 to Heggestad et al. and U.S. Patent No. 5,978,718 to Kull. Whether Claims 46-49 are unpatentable under 35 U.S.C. §103(a) over Neeson et al., Heggestad et al. and Kull and further in view of U.S. Patent No. 5,785,283 to Ehrenberger et al.

7. Argument.

The 35 U.S.C. §103(a) Rejection of Claims 1-3, 7, 9, 10 and 15-19 over Neeson et al. in view of Heggestad et al. and Kull

Applicants' assert that the applied references do not disclose one or more elements needed for a prima facie obviousness rejection. Furthermore, disclosure in the base reference teaches away from Applicants' claimed invention as claimed in independent Claim 1. Moreover, the Office Action has failed to show proper motivation for stringing together these three disparate references in an attempt, using hindsight reconstruction and lacking any proper teaching or suggestion to support the motivation, to modify Neeson et al. to achieve Applicants' claimed invention.

Teachings of the Applied References

Applicants' submit that Neeson et al. discloses (column 4, lines 33-40) an apparatus and method for tracking, reporting and recording equipment inventory on a locomotive. The apparatus on a locomotive is equipped with a mobile communications package (MCP) operatively connected to on-board intelligent devices (the equipment). A Health Report reflecting equipment identification information is compiled and stored in an on-board processing device (computer). The on-board processing device of the MCP is configured to both transmit equipment inventory information and to receive communications from at least one remote base communication unit (see Neeson et al. column 3, lines 61-66). The application (known as "ALERTS") of the invention of Neeson et al. is designed to "piggyback" on the already existing ABNS (AMCI Base Networking System) and ATCS (Advanced Train Contact System) systems on locomotives (see Neeson et al. column 22, lines 55-60). In ABNS, communications with locomotives is initiated through the base

stations, which are in contact with mobile communication packages (MCP) on-board the locomotives (see Neeson et al. column 2, lines 5-8) (emphasis provided).

Applicants' submit that Heggestad et al. discloses a train control system employing a series of wayside control units 34 spaced along the track to control trains 46 in a local area. Each wayside unit 34 has a data base in memory that includes operational profile data of the local area and which data are communicated to a train's computer 48. The train's computer 48 in turn determines the proper train control instructions based upon the received data (see Heggestad et al., Abstract and column 4, line 56 to column 6, line 35).

Applicants submit that Kull discloses a rail vision system 10 on a train comprising a signal locating system 100 and rail navigation system 200. The signal location system 200 isolates visually an upcoming wayside signal device. The rail navigation system 200 determines the position of the train on the track and tells the signal locating system 100 the location of the wayside signal device relative to the train. An on-board computer 240 of the rail navigation system 200 receives information from the signal location system 100. The on-board computer 240 has a data base with train and track information. The received information is compared to information stored in the on-board computer 240. The rail navigation system 200 then warns the train operator of restrictive signals and imposes braking of the train if the operator fails to acknowledge the warning (see Kull, Abstract and column 7, line 50 to column 8, line 53).

Applicants' Claim 1

Claim 1 (the only independent claim) recites (underling provided for emphasis):

> Preamble - A method of transferring files between a computer onboard a train and remote base stations, the computer having a data base, the data base including track structure information and location information about multiple remote base stations, the method comprising:
>
> 1st Paragraph - collecting one or more of event recorder data, train performance data and track data from onboard in files on the on-board computer;
>
> 2nd Paragraph - determining from the data base the location of the train relative to the track structure and whether the train is within communication range of one of the remote base stations, the determining being made by using location information about the train, information about the track structure and location information about the multiple remote base stations from the data base stored on the computer onboard the train;
>
> 3rd Paragraph - establishing from onboard the train a wireless communication with one of the multiple remote base

stations determined to be within communication range; and

4th Paragraph - determining onboard the train which of the files are new since a last transmission and transferring the new files to one of the multiple remote base stations determined to be within communication range.

Applicants acknowledge that, regarding the method steps of the 1st and 4th Paragraphs of Applicants' Claim 1, the applied references of Neeson et al., Heggestad et al. and Kull disclose those steps. However, with regard to the 4th paragraph, and assuming, for the sake of argument, that it would be obvious to combine the three applied references, Applicants do not acknowledge that the applied references disclose that the determination of which of the multiple remote base systems is determined to be within communication range is made on-board the train. Further discussion of this aspect of Claim 1 is included below.

Regarding the Method Step in the 2nd Paragraph of Applicants' Claim 1

I. A. The Office Action states (see Office Action, page 2, last line, to page 3, line 2), "Neeson et al. discloses...determining on-board if a remote station is within communication range (see column 5, lines 16-32 and column 7, line 63 through column 8, line 3)".

B. In rebuttal, Applicants assert that:

(1) the portion of the claim limitation of Applicants' Claim 1 that is at issue here is "determining from the data base [on-board] the location of the train relative to the track structure and whether the train is within communication range of one of the remote base stations...". The Office Action failed to include the critical underlined words "from the data base" and that omission is considered significant because the Office Action has failed to cite a disclosure in Neeson et al. that meets this portion of the limitation in Applicants' Claim 1;

(2) column 5, lines 16-32 in Neeson et al. does not disclose that any determination is made from the on-board data base about whether a remote base station is within communication range. The disclosure cited at column 5, lines 16-32 actually teaches away from such an on-board determination since the on-board processing device (computer) in Neeson et al. is discouraged from even attempting to "send equipment inventory information to a remote location if the locomotive is not in contact with the ground network of the stations", further supporting the disclosure that contact is initiated or established through the base or wayside stations; and

(3) regarding column 7, line 63 - column 8, line 3, there is no disclosure about any "determining from the data base [on-board]...whether the train is within communication

range of one of the remote base stations". In Neeson, et al., the only determination being made on-board is whether the train and a remote base station are in communication.

Thus, Applicants assert that the Office Action has clearly erred in its representation of what Neeson et al. discloses. For this reason, the rejection of Claim 1 is improper and should be reversed.

II. A. The Office Action acknowledges (see Office Action, page 3, lines 20-22) that "Neeson et al. fails to explicitly disclose determining on-board the location of the train and the location of the next remote station using location information about the train and the remote stations stored on the computer on-board the train"; however, the Office Action (page 3, lines 7-10) then turns to Heggestad et al., citing column 7, lines 6-20 and column 9, line 15 through column 10, line 25 for support for a statement that, "the on-board computer, already knowing the exact location of the train, transmits a request for authority to the appropriate nearby wayside unit" (emphasis added).

B. In rebuttal, Applicants assert that the Office Action fails to note that "the OBC (on-board computer) 48 on train 94 is continuously provided with the exact location of train 94 along the track 80" (emphasis added) (see Heggestad et al., column 7, lines 11-14); thus, Applicants suggest that if Heggestad et al.'s on-board computer "already knew the exact location of the train", as asserted by the Office Action on page 4, lines 6-7, then the OBC would not have to be continuously provided with that information. The transmission of the location of the train by the wayside unit requires that communication has already been established. This removes or makes unnecessary any need for establishing communication by the OBC.

Thus, Applicants assert that the Office Action's stated conclusion about Heggestad et al. is erroneous and also appears to teach away from Applicants' claimed invention. This additional reason provides grounds for reversal of the rejection of Claim 1.

III. A. The Office Action states (see Office Action, page 3, lines 12-15) that "it would have been obvious to one of ordinary skill in the computer art...to modify the system of Neeson et al. to include such determining the location of the train and the location of the appropriate remote station as per the teachings of Heggestad et al".

B. In rebuttal, Applicants assert that even if the combining of the cited references is assumed to be obvious, Applicants submit that there is still something missing. That is, the

Office Action provides no citation in Heggestad et al. or Neeson et al., where one of the references discloses "determining from the data base...whether the train is within communication range of one of the remote base stations..." (emphasis added).

Having only the Office Action's conclusory statement and no cited disclosure, Applicants assert that such a conclusion is clearly improper and should not be given any weight. This additional reason provides grounds for reversal of the rejection of Claim 1.

IV. A. The Office Action asserts (page 4, lines 15-18) that a motivation to modify Neeson et al. with Heggestad et al. is to overcome "known deficiencies in the ATCS (Advanced Train Control System) on which Neeson et al. is based", citing column 2, lines 9-29 of Heggestad et al for support.

B. In rebuttal, Applicants assert that the writings at lines 9-29 do not disclose any "known" deficiencies in the ATCS that would serve as a motivation to modify the equipment inventory (Health Report) system to which Neeson et al. is directed. Therefore, there is no basis or cited support for the stated motivation to modify Neeson et al. with Heggestad et al.

Thus, the Office Action statement is purely conclusory and should not be given any weight. The conclusory statement represents an attempt at impermissible hindsight reconstruction based on a misguided motivation to modify Neeson et al. to achieve Applicants' claimed invention. This additional reason provides grounds for reversal of the rejection of Claim 1.

V. A. The Office Action states (page 4, line 19 through page 5, line 5) that "Neeson et al. further fails to expressly disclose the computer having a database including track structure information and location information about multiple remote base stations and the determining the location of the train using the database information. However, Kull teaches such a database and its use in determining location relative to track structures and remote base stations (see, for example, col. 8, lines 27-35). Therefore, it would have been obvious to one of ordinary skill in the computer art at the time the invention was made to further modify the system of Neeson et al. to include such a database and relative location determination as per the teachings of Kull. One would be motivated to do so to provide additional warning capabilities to a train operator".

B. In rebuttal, Applicants assert that though Kull teaches an on-board computer having a data base with track information, such a teaching does not make it obvious to

combine the references to achieve the Applicants' claimed invention. There is no teaching or suggestion in any of the applied references, including Kull, that having the track information is a basis or motivation for using that track information to determine "from the data base [on-board] the location of the train relative to the track structure and whether the train is within communication range of one of the remote base stations" (emphasis added). In addition, merely having a disclosure of track information in Kull does not remedy the failure of Neeson et al. to disclose a teaching or suggestion to combine the references. Thus, absent a teaching or suggestion, there is no motivation to modify the Health Report System of Neeson et al., which reports equipment inventory to dispatchers or equipment monitors "off" the train, with the teachings of Kull to "provide additional warning capabilities to a train operator" (as stated in the Office Action, page 5, lines 1-5). Equipment inventory reports to a dispatcher have nothing to do with warnings to a train operator.

Therefore, the Office Action has failed to cite a teaching, suggestion or motivation in any of the references to support modifying Neeson et al. with Kull to achieve Applicants' claimed invention. This additional reason provides grounds for reversal of the rejection of Claim 1.

Regarding the Method Step in the 3rd Paragraph of Applicants' Claim 1

I. A. The Office Action states, (see Office Action page 3, line 2), that Neeson et al. discloses "initiating from on-board wireless communication between an on-board computer [field unit] and a remote station [base station]", citing Neeson et al., column 7, lines 29-47 for support.

B. In rebuttal, Applicants assert that:

(1) the writing at column 7, lines 29-47 does not address, and certainly does not disclose initiating anything, much less initiating a communication between the on-board computer and a remote station;

(2) The disclosure at lines 29-47 states "[E]ach base station 52 and 54 is preferably located alongside a railroad track...such that as a field unit (train or locomotive) 36 moves along the track, it remains in radio contact range of the nearest base station and is "passed off" to the next base station along the track. The field unit (locomotive) is the object of the verb "passed off", and thus it is apparent that communication is controlled from "off" the train. Such a disclosure, then, would more likely lead one of ordinary skill in the art to believe that the base stations were controlling the communication between them and the train

and not vice-versa. Such a likely belief is further reinforced by the fact that in Neeson et al. at column 7, lines 29-31, it is stated that "[D]ata communications between the front end processor 46 and field units 36 are facilitated through a plurality of base stations 52 and 54" (emphasis added); and

(3) regarding the disclosure in Neeson et al. at column 7, lines 29-47, in fact, the front end processor 46 (which is not on-board) tracks the field unit 36 (the train or locomotive) and one of the base stations 52, 54 to maintain radio contact with the train 36 (e.g., see Neeson et al. at column 7, line 63 to column 8, line 3). Furthermore, at column 22, lines 55-60 of Neeson et al., it is disclosed that "...the application [known as "ALERTS"] of the invention of Neeson et al. is designed to "piggyback" on the already existing ABNS [AMCI Base Networking System] and ATCS [Advanced Train Contact System] systems, the ALERTS application may be quickly and easily integrated into the locomotive system such as the MCP and into the system in the front end processor 46" (see also Neeson et al. Fig. 1). Moreover, column 2, lines 5-8 of Neeson et al. discloses that "In ABNS, communications with locomotives is initiated through the base stations, which are in contact with mobile communication packages (MCP) on-board the locomotive". This not only teaches that communication is initiated on-board but also strongly supports that, in Neeson et al., radio contact is initiated and maintained by the front end processor ("off" the train) and the base stations ("off" the train) and that the train transfers inventory data after the wayside (base) station makes contact with the train.

As stated in the Manual of Patent Examining Procedure (MPEP) at page 2100-132 (Rev. 3, August 2005), "[A] prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention. W.L. Gore and Associates, Inc. v. Garlock, Inc. 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983), cert. denied 469 U.S. 851 (1984)". As stated in In re Braat, 16 USPQ2d 1812, 1814 (Fed. Cir. 1990) "[O]ne important indicium of non-obviousness is "teaching away" from the claimed invention by the prior art". While this opinion (In re Braat) was not prepared for publication and is not citable as precedent, it does reflect that the Federal Circuit has addressed and characterized the issue of "teaching away". And, as stated in In re Dow Chemical, "[I]t is indeed pertinent that these references teach against the present invention. Evidence that supports, rather than negates, patentability must be fairly considered". (See In re Dow Chemical Co., 5USPQ2d 1529, 1532 (Fed. Cir. 1988).

Thus, Applicants submit that the Office Action statement in A. above about Neeson et al. is clearly erroneous and that very citation in Neeson et al. appears to teach away from Applicants' claimed invention. Furthermore, other disclosure in the base reference of Neeson et al. actually teaches away from Applicants' claimed invention. These additional reasons provide grounds for reversal of the rejection of Claim 1.

II. A. The Office Action states (see Office Action page 3, lines 7-18) the following conclusions (apparently based upon Neeson, et al.) (underlining emphasis added):

Conclusion (1) - "the locomotive must initiate communication on the base station's receiving frequency because the base station does not transmit data at this frequency and therefore, cannot initiate such communication";

Conclusion (2) - "Further, if a base station were to initiate communication with a locomotive MCP, then the locomotive must receive, process, and respond to such initiation";

Conclusion (3) - "and further, the MCP must acknowledge such initiating [by the base station] with an appropriate response, i.e., the MCP must carry out its own communication initiating procedures to enable communication to take place with the base station";

Conclusion (4) - "without providing this basic functionality, the prescribed communication system would not be able to exchange data between the base station and the locomotive MCP; and,

Conclusion (5) - Communication must be established on both ends for the system to function".

B. In rebuttal, Applicants assert that:

(1) There are no supporting citations for the above conclusory statements. In an effort to overcome the teaching of Neeson et al. that communication is controlled "off" the train, this Office Action rejection and its supporting arguments are employing "hindsight" to reach improper and inappropriate conclusions. As stated in W.L. Gore v. Garlock, Inc., 721 F.2d 1540, 1553, 220 USPQ 303, 312-13 (Fed. Cir. 1983), [T]o imbue one of ordinary skill in the art with knowledge of the invention in suit when no prior art reference or references of record convey or suggest that knowledge, is to fall victim to the insidious effect of a hindsight syndrome wherein that which only the inventor taught is used against its teacher;

(2) specifically regarding Conclusion A(1) above, the Office Action cites no support in Neeson et al. and is clearly making an impermissible, unsupported conclusory statement;

(3) regarding Conclusions A(2) and A(3) above, the Office Action is, in effect, acknowledging what has been disclosed in Neeson et al. That is, the initiation of the communication comes from the base station. That acknowledgement, therefore, undermines the key basis for this Office Action rejection. In essence, the MCP is simply responding to the base station. The Office Action cannot turn such a "response" on its head and call it an "establishment" or an "initiation"; and

(4) regarding Conclusions A(4) and A(5) above, the disclosure in Neeson et al. (column 5, lines 16-32 and column 7, lines 29-47 and 63-67 through column 8, line 3) suggests to one of ordinary skill in the art that the communication is established and maintained by the remote base station 52, 54. This is further supported by the disclosures in Neeson et al. at column 2, lines 1-3 and column 22, lines 55-59, where it is disclosed that the ALERTS system of Neeson et al. "piggybacks" on the "existing ABNS and ATCS Systems and "[I]n ABNS, communications with the locomotive is initiated through the base stations..." It thus appears that the Office Action is not reading the Neeson et al. reference as a whole, but is improperly picking and choosing disclosures in Neeson et al. to try to support its conclusions. As stated in In re Wesslau, 353 F.2d 238, 147 USPQ 391, 393 (CCPA 1965) "it is impermissible within the framework of Section 103 to pick and choose from any one reference only so much of it as will support a given position, to the exclusion of other parts necessary to the full appreciation of what such reference suggests to one of ordinary skill in the art".

Applicants assert that the conclusory statement in A(1) is clearly erroneous. The remaining Conclusions in A(2)-A(5) represent an acknowledgement that effectively contradicts this rejection, making the rejection clearly improper. Finally, the use of "hindsight" cannot make up for a lack of teaching and picking and choosing only parts of a reference is unacceptable. These additional reasons provide grounds for reversal of the rejection of Claim 1.

The 35 U.S.C. §103(a) rejection of Claim 4 as being unpatentable over Neeson, Heggestad, and Kull, as applied to Claim 1 above, and further in view of U.S. Patent No. 5,848,064 to Cowan.

Clam 4 is allowable for the same reasons as Claim 1.

The 35 U.S.C. §103(a) rejection of Claims 20 and 21 as being unpatentable over Neeson, Heggestad, and Kull, as applied to Claim 1 above, and further in view of U.S. Patent No. 5,420,883 to Swensen et al.

Claims 20 and 21 are allowable for the same reasons as Claim 1.

The 35 U.S.C. §103(a) rejection of Claim 51 as being unpatentable over Neeson, Heggestad, and Kull, as applied to Claim 1 above, and further in view of U.S. Patent No. 5,620,155 to Michalek.

Claim 51 is allowable for the same reasons as Claim 1.

Claims 2-4, 9-10, 15-21, 46-49 and 51 depend from Claim 1 and should be allowable for the same reasons as Claim 1.

The 35 U.S.C. §103(a) Rejection of Claims 46-49 as being unpatentable over Neeson et al., Heggestad et al. and Kull, as applied to Claim 1 above, and further in view of U.S. Patent No. 5,785,283 to Ehrenberger et al.

Applicants submit that Ehrenberger et al. discloses a system and method of communicating via digital radio between a train (such as a locomotive) and a wayside system positioned at the wayside of a railway system. The wayside system detects defects at the wayside and information related to the defects is transmitted from the wayside system to the train for display in the locomotive cab (see Ehrenberger et al., Abstract and Fig. 2).

Claim 46 recites: A method according to claim 1, wherein one of the remote base stations includes track data, and further including the step of transferring the track data from one of the remote base stations to the on-board computer and subsequently transferring track data from the on-board computer to another remote base station (emphasis added).

Regarding Claim 46, Applicants acknowledge that Neeson et al. teaches transferring data from a remote station to an on-board computer and from an on-board computer to a remote base station, as stated in the Office Action at paragraph 8. Applicants also acknowledge that Neeson et al. fails to teach transferring track data or displaying track data on the train, as also stated in paragraph 8 of the Office Action, Lastly, Applicants acknowledge that Ehrenberger et al. teaches transferring track data from a remote station to an on-board computer and displaying the track data on the train, as stated in the Office Action at paragraph 8 and as disclosed in Ehrenberger et al. at column 3, lines 9-26.

However, Applicants' assert that neither Ehrenberger et al. nor any of the other applied references discloses "subsequently transferring the track data from the on-board

computer to another remote base station" (emphasis added), as claimed in Applicants' Claim 46. The Office Action has postulated a motivation (see Office Action page 8, paragraph 8, lines 6-11) based on a need "to disseminate the information to other train operators in the system". Such a postulation is not based upon any teaching or suggestion in Ehrenberger et al. or in Neeson et al. And, since Neeson et al. is directed to an equipment inventory tracking, reporting and recording system (ALERTS) that provides information to dispatchers or inventory control monitors about whether equipment is or is not on a particular locomotive, there is absolutely no motivation, teaching or suggestion to modify the ALERTS system of Neeson et al. to transfer track data (received from one remote base station) from the on-board computer to another remote base station. The transfer of train track data is not related to the equipment inventory and Health Report system of Neeson et al. Moreover, even if Neeson et al. teaches sending information or data other than Health Reports about equipment inventory, there is no teaching in Neeson et al. of transmitting track data received from a first remote station to a second remote station.

Thus, Applicants assert that the Office Action has not provided any citation in the applied references that discloses the referenced portion of Applicants' Claim 46. Nor has the Office Action provided a sufficient teaching, suggestion or motivation to support its obviousness assertion regarding the referenced portion of Applicants' Claim 46.. For these reasons, the rejection of Claim 46 is improper and should be reversed.

Claims 47-49 depend from Claim 46 and the same arguments apply to those claims as applied above to Claim 46.

Conclusion of Argument

From the above, it is readily apparent that Neeson et al., Heggestad et al. and Kull do not, individually or in combination, disclose the subject matter in the 2nd and 4th paragraphs of Applicants Claim 1. Furthermore, there is no teaching or suggestion in any of the applied references that provides a proper motivation to modify the equipment inventory system of Neeson et al. to achieve Applicants' claimed invention. The final rejection includes errors in what the applied references disclose, erroneous assertions and conclusions, and conclusions without proper supporting reasons or reference citations. Some of the Office Action statements and citations essentially include acknowledgements that, frankly, contradict the rejection of Claim 1. Neeson, et al. itself includes disclosure that teaches away from Applicants' claimed invention. It is also readily apparent that Neeson et al., Heggestad et al., Kull and Ehrenberger et al. do not, individually or in combination, disclose the subject matter

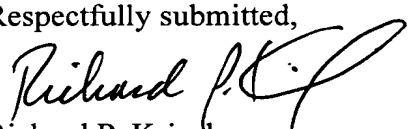
of the last portion of claim 46 ("subsequently transferring the track data from the on-board computer to another remote base station") nor does the Office Action cite a teaching or suggestion in any of the applied references that would provide a valid motivation to modify Neeson et al. to do so.

For all the foregoing reasons, the Appellants respectfully request that the rejection of Claims 1-3, 7, 9. 10, 15-19 and 46-49 be reversed and the application with Claims 1-4, 7, 9-10, 15-21, 46-49 and 51 be allowed.

Even if Neeson et al. teaches sending information or data other than Health Reports, there is no teaching of transmitting track data received from a first remote station to a second remote station.

It is respectfully requested that, if necessary to effect a timely response, this paper be considered as a Petition for an Extension of Time sufficient to effect a timely response and shortages in other fees, be charged, or any overpayment in fees be credited, to the Account of Barnes & Thornburg LLP, Deposit Account No. 10-0435 (509/35644).

Respectfully submitted,



Richard P. Krinsky
Reg. No. 47,720
(202) 289-1313
BARNES & THORNBURG LLP
Suite 900
750 17th Street, N.W.
Washington, DC 20006-4607

Claims Appendix

1. A method of transferring files between a computer onboard a train and remote base stations, the computer having a data base, the data base including track structure information and location information about multiple remote base stations, the method comprising:

collecting one or more of event recorder data, train performance data and track data from onboard in files on the on-board computer;

determining from the data base the location of the train relative to the track structure and whether the train is within communication range of one of the remote base stations, the determining being made by using location information about the train, information about the track structure and location information about the multiple remote base stations from the data base stored on the computer onboard the train;

establishing from onboard the train a wireless communication with one of the multiple remote base stations determined to be within communication range; and

determining onboard the train which of the files are new since a last transmission and transferring the new files to one of the multiple remote base stations determined to be within communication range.

2. A method according to claim 1, including determining whether the remote base station has updates to be transferred and transferring the updates to the on-board computer.

3. A method according to claim 2, wherein the updates include one or more of software updates for the on-board computer, operational data and callbook that defines with which remote base stations the onboard computer will initiate communication.

4. A method according to claim 2, wherein determining whether the remote base station has updates to be transferred includes comparing the version in the on-board computer to the version in the remote base station and transferring only the additions, changes, and deletions resulting between the comparison.

7. A method according to claim 1, wherein, after an interruption of wireless communication, file transfers may be resumed during one or more subsequent communication sessions until all files have been received successfully.

9. A method according to claim 1, wherein the train includes plural event recorders and including transferring data from each of the event recorders to the on-board computer.

10. A method according to claim 1, wherein

the train includes plural event recorders each being connected to a respective on-board computer; and

the method includes initiating wireless communication between the on-board computers and the remote base station, and transferring event recorder data from each of the on-board computers to the remote base station.

12. A method according to claim 1, including

transferring the files from the remote base station to a simulator;

operating the simulator with the transferred files; and

adjusting parameters of the simulator until data of the simulator matches data from the file.

13. A method according to claim 12, wherein the parameters include one or more of grade resistance, curve resistance, rolling resistance, tractive effort of the train's locomotives, dynamic brake effort of the locomotives, pneumatic brake system parameters, and train weight.

14. A method according to claim 12, analyzing the data from the files on the simulator after adjusting of the parameters.

15. A method according to claim 1, including establishing communication between the remote base station and a remote home base station; and determining what files have to be transferred and transferring the files.

16. A method according to claim 15, wherein the files to be transferred from the home base station to the remote base station includes one or more of software updates for the remote base station, software updates for the onboard computer, operational data for the onboard

computer, and a callbook that defines with which remote base stations the onboard computer will initiate communication.

17. A method according to claim 15, wherein the files to be transferred from the remote base station to the home base include one or more of files received from the on-board computer and files including operation information of the remote base station.

18. A method according to claim 17, wherein operational information includes one or more of: locomotives contacted, which software updates were transferred, which onboard computer files were received, and communication statistics.

19. A method according to claim 15 wherein communication is established between the remote base station and the remote home base station when one or more of the remote base station has new files from the on-board computer, the remote home base station has new software for the remote base station or on-board computer, requested by user and according to a schedule.

20. A method according to claim 1, including establishing communication between two remote base stations; and determining what files have to be transferred and transferring the files.

21. A method according to claim 20, establishing communication and transferring files between remote stations for all the remote base stations in a subnet.

46. A method according to claim 1, wherein one of the remote base stations includes track data, and further including the step of transferring the track data from one of the remote base stations to the on-board computer and subsequently transferring track data from the on-board computer to another remote base station.

47. A method according to claim 46, including displaying the track data on the train.

48. A method according to claim 46 wherein the track data includes one or more of signal aspect, crossing gate position, crossing occupancy status, and other trains in the vicinity.

49. A method according to claim 46 including correlating train performance data with track data.

51. A method according to claim 1, wherein the determining of the location of the train uses a GPS.

Evidence appendix

None.

Related proceedings appendix

None.